

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW DIPLOPOD FROM TEXAS AND A NEW
CHILOPOD FROM ALASKA.

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In a miscellaneous lot of myriopods sent to me for identification by E. W. Nelson, chief of the Bureau of Biological Survey, appear two previously undescribed forms, one a *Geophilus* from Alaska, and the other a second species of the genus *Ethojulus*, recently established by the writer for a Louisiana species, *E. amphelictus* Chamb.¹ In publishing descriptions of these new forms it seems worth while to list the other species in the lot for the sake of the records.

DIPLOPODA.

1. *Fontaria virginiensis* (Drury).

One immature female taken at Falls Church, Va., 24 August, 1919, by L. O. Jackson.

2. *Polydesmus serratus* Say.

Two adult males and one female taken at Painesville, Ohio, September, 1918, by E. R. Kalmbach.

3. *Parajulus impressus* Say.

One male taken from the crop of a lesser yellow-legs, *Totanus flavipes* (Gmel.) at Washington, D. C., 31 August, 1893.

4. *Parajulus*, sp.

An incomplete specimen taken at Lake Wanitha, McHenry, North Dakota, 22 August, 1917, by D. C. Mabbott.

5. *Ethojulus cyaneus*, sp. nov.

The general color typically obscure dark blue with a narrow pale stripe across each metazonite; anal segment and especially the head, collum and

¹ Canadian Entomologist, Nov., 1918, p. 361.

the second and third segments contrasting in being of dark brown or chestnut color wholly lacking the blue tinge. Legs brown or chestnut. Antennae darker brown. Under the lens the collum shows the usual light areolations as do the second and third tergites and the vertex of head. The usual darker band between eyes enclosing two lighter spots below at level of antennae. Clypeal region lighter.

In the female the collum is narrowed down each side. In the male it is much elongate as usual in *Parajulus*, with the lower margin on each side long and straight. The middorsal length about equalling the combined length of the next two and a half or three segments when not coiled. Margined below and up the anterior corner but otherwise not striate. Second tergite in the female extending below level of collum with anterior edge lowest; but in the male the lower edge of the second tergite is straight and on a level with that of the collum.

Second tergite above lower edge with typically four longitudinal striae and a shorter isolated one farther dorsad, this more pronounced on the third tergite. On the following segments the number of striae increases, the series extending halfway up the side but not attaining the level of the pore by a considerable space. These longitudinal striae deep, crossing only the metazonite. On the prozonite in front of them are fewer striae, similarly pronounced, which curve dorsad and cross the dorsum as transverse striae normally mostly covered by the preceding metazonite in each case. Segmental suture strongly marked, conspicuously angled at level of pore which lies in line with its straight portion.

Anal tergite acutely produced beyond the valves behind, the cauda straight. Anal valves not margined.

Legs in general rather long and slender.

In the male the first legs are enlarged and strongly crassate, the metatarsus long and straight, flattened beneath. Second legs of the male reduced; the coxae enlarged and produced forward in a slender, linguiform, straight process which extends to the gnathochilarium, slightly narrowing distad.

Cardo of mandibles in the male strongly produced ventrad, the process subacute below, attaining level of edge of labrum.

The gonopods have the general configuration of those of *E. amphelictus*. First branch of anterior pair of ordinary texture, narrowly ovate above the constricted base, strongly setose. Second branch strongly chitinous and smooth, a broad thin plate at base abruptly narrowing into a slender blade which extends ventrad with weakly sigmoidal or sinuous flexure, distally bending abruptly mesad and then caudad; without processes or spurs. The posterior gonopods are broad blades curving forward in contact with body, then ventrad and finally at ends mesad toward each other; secondary spur or blade of each extending straight ventrad, slender and acute, long, much as in *amphelictus*.

Number of segments, fifty-four (male type).

Length about 45 mm.; width, 2.8 mm.

Locality.—Texas: Bay City. A. Wetmore coll., 1 January, 1918.

Obviously different in coloration from the genotype in its dark blue color and the lack of contrast between dorsum and lower part of sides and venter, and the lack of pronounced pattern. It differs very clearly in the details of the gonopods of the male; *e. g.*, in the spur to the posterior blades of the first pair, with distal ends extending mesad instead of first mesad and then abruptly caudad, and in the much broader posterior blades at distal ends bending mesad toward each other instead of caudad, etc.

6. *Spirobolus marginatus* (Say).

Two females taken at Painesville, Ohio, 1 September, 1918, by E. R. Kalmbach.

CHILOPODA.

7. *Hemiscolopendra punctiventris* (Newport).

One specimen taken on James Island, South Carolina, 6 April, 1919, by E. R. Kalmbach.

8. *Geophilus ethopus*, sp. nov.

Color fulvous of a slight orange tinge toward ends.

Cephalic plate broad, but little longer than wide (about 11:01). Widest half-way between middle and anterior end. Anterior border very obtusely angular. Caudal margin wide, truncate or very slightly excurved. No frontal suture. Rather coarsely and densely punctate.

Prebasal plate not exposed, the basal plate being overlapped by the cephalic. Exposed portion of basal plate with width four and a fourth times the median length. Claws of prehensors when closed about equaling anterior margin of head. Prosternum and joints of prehensors unarmed.

Dorsal plates bisulcate, the sulci rather wide and shallow, posteriorly indistinct.

Anterior sternites with a deep median longitudinal sulcus, becoming shallower in going caudad, not obvious in middle and posterior regions.

First spiracles large, subcircular, being somewhat angled. All other spiracles strictly circular, the second ones abruptly much smaller than the first, the decrease in size of the others being very gradual in going caudad.

First legs only a little shorter and more slender than the second. Legs of anterior region in general much shorter than those of the posterior region.

Last ventral plate narrow, parallel-sided, much longer than wide (about 3:2); caudal margin straight or a little incurved. Coxopleuræ with numerous small and moderate pores.

Anal legs of male conspicuously crassate, the last two articles rather abruptly less so than the others. Armed with a small straight claw.

Pairs of legs of male type, forty-one.

Length, 35 mm.

Locality.—Alaska: Iditarod, June, 1918, collected by A. H. Twitchell.

Geophilus alaskanus Cook, described from Sitka, Alaska, is a somewhat similar species. It differs in its deeper, *Linotaenia*-like coloration, in having the last ventral plate trapeziform and nearly as wide as long, in the fewer coxopleural pores, more numerous legs, smaller first legs, and in having the anal legs of male not truly crassate with claws of nearly normal size.

9. *Gosibius arizonensis* Chamberlin.

One adult female taken at Flagstaff, Arizona, 7 October, 1916, D. A. Gilchrist.

10. *Ezembius stejneri* (Bollman).

One specimen apparently this species, taken in the Iditarod region, Alaska, 27 July, 1917, A. H. Twitchell.

11. *Neolithobius mordax* (Koch).

A male taken at Bay City, Texas, 1 January, 1918, by A. Wetmore.

12. *Neolithobius*, sp.

Two specimens were taken from the crop of an eared grebe, *Colymbus nigricollis californicus* (Brehm), collected at St. Xavier, Montana, 31 May, 1917. They are in too poor a condition for certain identification.